

## POWER OF ATTORNEY OR AUTHORIZATION OF AGENT

Application Number	
Filing Date	
First Named Inventor	Mei Luo
Title	DYNAMICALLY-ADJUSTABLE DIFFERENTIAL OUTPUT DRIVERS
Art Unit	
Examiner Name	
Attorney Docket Number	A1070

I hereby appoint:

☒ Practitioners at Customer Number

OR AND

☒ Practitioner(s) named below:

Name	Registration Number
G. Victor Treyz	36,294
Derek Minihane	39,774
Archana Ojha	53,408
Henry Ohab	45,854

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please change the correspondence address for the above-identified application to:

☐ The above-mentioned Customer Number.

OR

☐ Practitioners at Customer Number.

OR

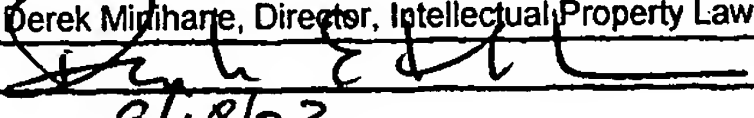
<input type="checkbox"/> Firm or Individual Name			
Address			
Address			
City	State	Zip	
Country			
Telephone	Fax		

I am the:

☐ Applicant/Inventor.

☒ Assignee of record of the entire interest. See 37 CFR 3.71.  
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

### SIGNATURE of Applicant or Assignee of Record

Name	Derek Minihane, Director, Intellectual Property Law and Assistant Secretary		
Signature			
Date	9/18/03	Telephone	408-544-6940

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☐ \*Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

**STATEMENT UNDER 37 CFR 3.73(b)**Applicant/Patent Owner: Altera CorporationApplication No./Patent No.: Not yet available Filed/Issue Date: Concurrently herewithEntitled: DYNAMICALLY-ADJUSTABLE DIFFERENTIAL OUTPUT DRIVERS

Altera Corporation, a Corporation  
 (Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or

2. ☐ an assignee of less than the entire right, title and interest.  
 The extent (by percentage) of its ownership interest is \_\_\_\_\_ %  
 in the patent application/patent identified above by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

**OR**

B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
 The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

2. From: \_\_\_\_\_ To: \_\_\_\_\_  
 The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

3. From: \_\_\_\_\_ To: \_\_\_\_\_  
 The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☒ Copies of assignments or other documents in the chain of title are attached.  
 [NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

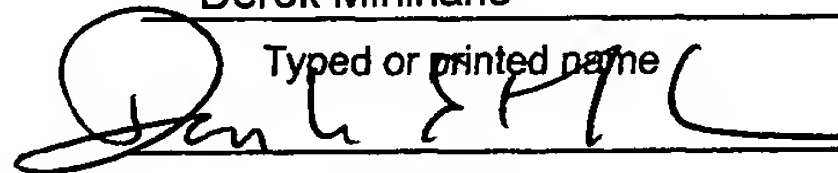
9/18/03  
 Date

408 544-6940

Telephone number

Derek Minihaue

Typed or printed name



Signature

Director, Intellectual Property Law and  
 and Assistant Secretary

Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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A S S I G N M E N T

WHEREAS, We, Mei Luo, Sergey Shumarayev, Wilson Wong, and Chong H. Lee, residing respectively at 1072 Fleetwood Drive, San Jose, California 95120, 2328 Rocky Point Court, San Leandro, California 94579, 301 Felton Street, San Francisco, California 94134, and 116 Palmer Street, San Ramon, California 94583 have made an invention entitled:

## DYNAMICALLY-ADJUSTABLE DIFFERENTIAL OUTPUT DRIVERS

and are about to make an application for United States Letters Patent therefor, the same having been executed by us on even date herewith; and

WHEREAS, ALTERA CORPORATION, a corporation organized and existing under the laws of the State of Delaware and having an address of 101 Innovation Drive, San Jose, California 95134, is desirous of acquiring the entire interest in said invention, said United States patent application and in any Letters Patent which may issue thereon;

NOW, THEREFORE, be it known that for and in consideration of the sum of One Dollar (\$1.00) paid, and other good and valuable consideration, the receipt of sufficiency of which is hereby acknowledged, we do hereby sell, assign and transfer unto the said ALTERA CORPORATION, its successors, assigns and legal representatives, all right, title and interest in and to said invention and any improvements thereon for all countries of the world, and in


and to said United States patent application, including any continuations, continuations-in-part and divisions thereof, and any substitute applications therefor, and including the right to claim priority under the International Convention based on said patent application, and any patent which may issue thereon, and any reissues of the same; and all right, title and interest in and to every patent application filed or to be filed on said invention in any other country, including renewals, revivals, continuations and divisions thereof, and any substitute applications therefor, and any and all patents which may issue thereon, and any reissues and extensions of the same;

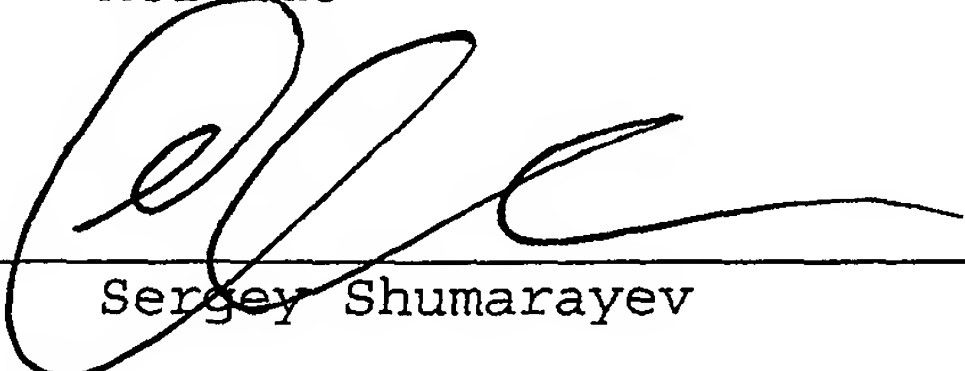
and we hereby authorize and request competent authorities to grant and issue any and all patents on said invention to the said ALTERA CORPORATION as the assignee of the entire interest therein; and we further agree to execute upon request of the assignee such additional documents, if any, as are necessary and proper to secure patent protection on said invention throughout all countries of the world, and to otherwise give full effect to and perfect the rights of the assignee under this Assignment.

IN TESTIMONY WHEREOF, we have hereunto signed our names on the dates indicated hereinafter.

9/11/2003  
Date

9/11/03  
Date

  
Mei Luo

  
Sergey Shumarayev

9/11/2003  
Date

Wilson Wong  
Wilson Wong

9/15/03  
Date

Chong H. Lee  
Chong H. Lee

**DECLARATION FOR UTILITY OR  
DESIGN  
PATENT APPLICATION  
(37 CFR 1.63)**



Declaration  
Submitted  
With Initial  
Filing

OR



Declaration  
Submitted after Initial  
Filing (surcharge  
(37 CFR 1.16 (e))  
required)

Attorney Docket Number

A1070

First Named Inventor

Mei-Luo

**COMPLETE IF KNOWN**

Application Number

Filing Date

Art Unit

Examiner Name

I hereby declare that:

Each inventor's residence, mailing address, and citizenship are as stated below next to their name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

DYNAMICALLY-ADJUSTABLE DIFFERENTIAL OUTPUT DRIVERS

*(Title of the Invention)*

the specification of which



is attached hereto

OR



was filed on (MM/DD/YYYY)

as United States Application Number or PCT International

Application Number

and was amended on (MM/DD/YYYY)

(if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				Yes	No
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

This collection of information is required by 37 CFR 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

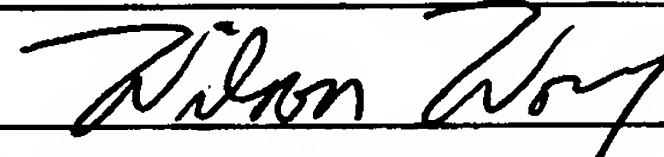
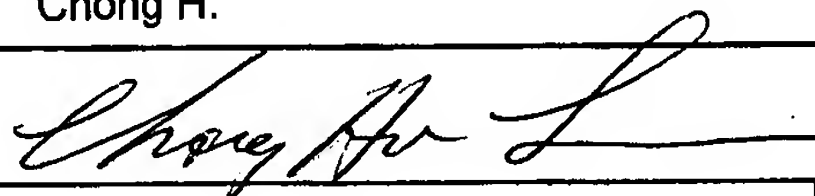
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

## DECLARATION — Utility or Design Patent Application

Direct all correspondence to: <input checked="" type="checkbox"/> Customer Number or Bar Code Label <span style="border: 1px solid black; padding: 2px;">36532</span> OR <input type="checkbox"/> Correspondence address below			
Name			
Address			
City		State	ZIP
Country	Telephone	Fax	
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.			
NAME OF SOLE OR FIRST INVENTOR:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any]) Mei		Family Name or Surname Luo	
Inventor's Signature			Date 9/11/2003
Residence: City San Jose	State CA	Country USA	Citizenship China
Mailing Address 1072 Fleetwood Drive			
City San Jose	State CA	ZIP 95120	Country USA
NAME OF SECOND INVENTOR:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any]) Sergey		Family Name or Surname Shumarayev	
Inventor's Signature			Date 9/11/03
Residence: City San Leandro	State CA	Country USA	Citizenship USA
Mailing Address 2328 Rocky Point Ct.			
City San Leandro	State CA	ZIP 94579	Country USA
<input checked="" type="checkbox"/> Additional inventors or a legal representative are being named on the <u>1</u> supplemental sheet(s) PTO/SB/02A or 02LR attached hereto.			



<b>DECLARATION</b>	<b>ADDITIONAL INVENTOR(S)</b> Supplemental Sheet
Page <u>1</u> of <u>1</u>	

<b>Name of Additional Joint Inventor, if any:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor		
Given Name (first and middle (if any))		Family Name or Surname		
Wilson		Wong		
Inventor's Signature 		Date <u>9/11/2003</u>		
Residence: City	San Francisco	State	CA	Country USA
Citizenship USA				
Mailing Address				
Mailing Address 310 Felton Street				
City	San Francisco	State	CA	Zip 94131
Country		USA		
<b>Name of Additional Joint Inventor, if any:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor		
Given Name (first and middle (if any))		Family Name or Surname		
Chong H.		Lee		
Inventor's Signature 		Date <u>9/15/03</u>		
Residence: City	San Ramon	State	CA	Country USA
Citizenship USA				
Mailing Address 116 Palmer St.				
Mailing Address				
City	San Ramon	State	CA	Zip 94538
Country		USA		
<b>Name of Additional Joint Inventor, if any:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor		
Given Name (first and middle (if any))		Family Name or Surname		
Inventor's Signature		Date		
Residence: City		State		Country
Citizenship				
Mailing Address				
Mailing Address				
City		State		Zip
Country				

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This declaration has two initial pages plus this one supplemental sheet